

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN03/00910

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B01J29/08 B01J37/00 C01B39/24 C10G47/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B01J C01B C10G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI, PAJ, EPODOC, CNPAT, CNKI

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category ^a	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
PX	CN, A, 1382631 (CHINA PETRO-CHEM CORP ETAL) 04. Dec. 2002 (04. 12. 02) , claims 1-3, page 4, line 23—page 5, line 18	1-13, 15-24
PY		14, 25-33
PX	CN, A, 1382525 (CHINA PETRO-CHEM CORP ETAL) 04. Dec. 2002 (04. 12. 02) , claims 1-7	15-24
PY		25-33

 Further documents are listed in the continuation of Box C. See patent family annex.

• Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim (S) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
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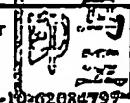
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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	CN, A, 1325940 (CHINESE PETRO CHEM GROUP CO ETAL) 12.Dec.2002 Claims 7-9, 12	14, 25-33
A	CN, A, 1127161 (PETROCHEMICAL SCI INST CHINESE PETROLEUM) 24.July.1996 (24.07.96) . whole document	1-33
A	US, A, 5705142 (COSMOL OIL CO LTD ETAL) 06.Jan.1998 (06.01.98), whole document	1-33
A	US, A, 4632749 (UOP INC) 30.Dec.1986 (30.12.86), whole document	1-33
A	JP, A, 4059616 (COSMO OIL CO LTD ETAL) 26.Feb.1992 (26.02.92), whole document	1-33

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CN03/00910

CN 1382631 A	04.12.02	US2003064881A1	03.04.03
		WO02087758 A1	07.11.02
CN1382S2S A	04.12.02	US2003064881A1	03.04.03
		WO02087758 A1	07.11.02
CN1325940 A	12.12.01	NONE	
CN1127161 A	24.07.96	NONE	
US5703142 A	06.01.98	US5646082 A	08.07.97
US4632749 A	30.12.86	EP0122063 A	17.10.84
		AU2558984 A	20.09.84
		JP59177138 A	06.10.84
		EP0122063 B	28.05.86
		DE3460173G	03.07.86
		CA1209117 A	05.08.86
		JP2038258B	29.08.90
JP4059616A	26.02.92	NL193830B	01.08.00
		NL9101147 A	16.01.92
		JP4305 248 A	28.10.92
		US5227352 A	13.07.93
		JP2544317B2	16.10.96
		JP2651472B2	10.09.97